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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,971	09/30/2003	Gary K. Michelson	101.0059-02000	4939

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EXAMINER	
WILLSE, DAVID H	
ART UNIT	**PAPER NUMBER**
3738	
MAIL DATE	**DELIVERY MODE**
08/04/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/674,971	MICHELSON, GARY K.	
	Examiner	Art Unit	
	David H. Willse	3738	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *March 23, 2010, and May 6, 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *29-59 and 62-68* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *29-59 and 62-68* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3-23-10*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 29, 30, 33-37, 39, 40, 41, 44-48, 50-59, 62, 63, and 65-67 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Kenna, US 4,714,469. Particular attention is directed to Figures 1 and 4; abstract; column 1, lines 46-56; column 2, lines 7-17; column 5, lines 47-56; and column 6, lines 53-57. Regarding claims 33, 34, 44, and 45, because of the space **9**, the implants are effectively combined with a fusion promoting material in the form of bone (column 4, lines 28-30); the porous coating **5** also promotes bone ingrowth and fusion (column 3, line 63, to column 4, line 7; column 1, lines 5-8). Regarding claims 37 and 48, a rotational component of insertion movement would have been inherent in order to steer each implant into alignment with the vertebrae.

Claims 31, 32, 42, 43, 64, and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kenna, US 4,714,469, and Brantigan, 5,192,327. Kenna lacks openings communicating with a hollow space containing fusion promoting material such as bone, but such was common in the art at the time of the present invention, as seen from

Brantigan (drawings, abstract, etc.). To so modify Kenna would have been obvious in order to enhance the long-term stability (Brantigan: column 7, lines 21-23; etc.), with further motivation having been provided by the purpose of space **9** (Kenna: column 4, lines 28-30). Moreover, such a modification would have led to nothing more than predictable results because of the prevalence of osseo-integration features in the art. Conversely, providing the Brantigan embodiment of Figure 2, for example, with elongated protuberances of the sort taught by Kenna would have been obvious in order to improve initial rotational stability (Kenna: column 4, lines 22-23), with further motivation having been provided by similarities in design and purpose of these implant types.

Claims 38 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenna, US 4,714,469, in view of Crozet, WO 98/48738 A1 (via related US 6,855,168). A screw or screws spanning the disc space and threadingly engaging adjacent vertebrae, as taught in Crozet (Figures 1, 28, 42; column 1, lines 43-47; column 2, lines 59-61; column 8, lines 12-19; etc.), would have been an obvious supplement or substitute for the protuberances **5** of Kenna in order to improve anchorage and to promote bone fusion via screw cutting edges (Crozet: column 4, lines 21-24; etc.), with such a variant leading to nothing more than predictable results in view of the widespread use of bone screws in the art.

Applicant's remarks have been considered but are deemed to be moot in view of the new grounds of rejection, necessitated by the newly added language pertaining to the implant(s) being inserted after the forming of the opening(s) as claimed. Therefore:

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action

is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Willse, whose telephone number is 571-272-4762 and who is generally available Monday through Thursday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott, can be reached on 571-272-4754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/David H. Willse/
Primary Examiner
Art Unit 3738